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## Patent Claims

- 1. Recording material for the production of offset printing plates, having a web- or plate-form support, a radiation-sensitive layer on the front of the support and a continuous, pigment particle-free layer on the back, characterized in that the back layer essentially consists of an organic polymeric material having a glass transition temperature Tp of at least 45°C, and its surface has a Bekk smoothness of from 5 to 800 s.
  - 2. Recording material according to Claim 1, characterized in that the organic polymeric material is a polymer which has been thermally crosslinked by the action of heat and/or UV radiation.
  - 3. Recording material according to Claim 1 or 2, characterized in that the back layer has a Bekk smoothness of from 5 to 600 s.
- 4. Recording material according to one or more of Claims 1 to 3, characterized in that the back layer has on its surface a structure consisting of longitudinal or transverse grooves, where the ratio of the Ra values to one another is preferably at least 5, and the ratio of the Rz ratios to one another is preferably at least 6.
- 5. Recording material according to one or more of Claims 1 to 3, characterized in that the structure of the back layer is direction-dependent.
  - 6. Recording material according to one or more of Claims 1 to 5, characterized in that the radiation-sensitive layer located on the front of the support is positive-working.
  - 7. Recording material according to one or more of Claims 1 to 5, characterized in that the radiation-

sensitive layer located on the front of the support is negative-working.

- 8. Recording material according to one or more of Claims 1 to 5, characterized in that the radiation-sensitive layer located on the front of the support works on the basis of silver halide.
- 9. Recording material according to one or more of Claims 1 to 5, characterized in that the radiation-sensitive layer located on the front of the support is thermally positive-working or thermally negative-working.
- 10. Process for the production of the recording
  15 material according to one or more of Claims 1 to 9,
  characterized in that the back layer is applied by roller
  application.
- 11. Process according to Claim 10, characterized in that the roller application is direct roller application.
  - 12. Process according to Claim 10, characterized in that the roller application is indirect roller application.

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- 13. Process according to Claim 10, characterized in that the roller application is carried out using an engraved roller.
- 30 14. Process according to Claim 10, characterized in that the roller application is carried out using a structured rubber roller.
- 15. Process for the production of the recording material according to one or more of Claims 1 to 9, characterized in that the back layer is applied with the aid of a slot die system.

16. Process for the production of the recording material according to one or more of Claims 1 to 9, characterized in that the back layer is applied by spray application.

17. Process according to one or more of Claims 10 to 16, characterized in that the back layer is produced from a lacquer which has a viscosity at room temperature (23°C) of from 80 to 1000 mPa·s, preferably from 100 to 600 mPa·s.

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